

WHAT IS CLAIMED IS:

1. A replication system for generating one replica table using a plurality of master tables, according to operation information of addition, update, and deletion in a plurality of master tables associated with to a database, comprising:

means for matching data items of said plurality of master tables by use of particular data in the master tables as a joining key to join each other; and

means responsive to said matching means for replicating the matched data items based on said joining key to generate one replica table.

2. A replication system according to claim 1, wherein said master table is a table associated with a relational database or a hierarchic database.

3. A replication system according to claim 1, wherein at data insertion or data deletion of all said master tables or at data insertion or data deletion of either one of said master tables, particular timing is selected from a plurality of timings to conduct a predetermined replication to thereby conduct the replication.

4. A replication system, wherein for a master table in which data has not been inserted, particular data indicating absence of data is set in place of insufficient data of the master table to thereby conduct a replication.

5. A replication program for use in a system in which a plurality of database servers are connected to a computer, said replication program implementing the operation of replication by the computer comprising the steps:

- controlling a replication control table;
- acquiring master table operation information stored in said database servers;
- extracting a joining key contained in the master table operation information and data associated with the joining key;
- updating replication control information contained in the replication control table according to the joining key and the data associated with the joining key; and
- operating a replica table according to the replication control information.

6. A replication program according to claim 5, wherein said replica table is operated further according to timing information to conduct a replication contained in the replication control table.

7. A replication program according to claim 5, wherein said replication control table includes a master table name, a replica table name, a joining key definition to specify a column name of a master table as a key to join data of tables with each other, and a replication timing definition to specify timing to conduct a replication.

8. A replication program according to claim 6 wherein said timing information to conduct a replication indicates that for data having a same joining key in a plurality of master tables, when insertion is conducted in all said master tables, data corresponding to the data is inserted in the replica table.

9. A replication program according to claim 6 wherein said timing information to conduct a replication indicates that among a plurality of master tables, a primary table is determined, and when data insertion is conducted for the primary table, data corresponding to the data is inserted in the replica table.

10. A replication program according to claim 6, wherein said timing information to conduct a replication indicates that when data insertion is conducted for either one of a plurality of master tables, data corresponding to the data is inserted in the replica table.

11. A replication program according to claim 6, wherein said timing information to conduct a replication indicates that for data having a same joining key in a plurality of master tables, when deletion is conducted in all said master tables, data corresponding to the data is deleted from the replica table.

12. A replication program according to claim 6, wherein said timing information to conduct a replication indicates that among a plurality of master tables, a primary table is determined, and when data deletion

is conducted for the primary table, data corresponding to the data is deleted from the replica table.

13. A replication program according to claim 6, wherein said timing information to conduct a replication indicates that when either one of data having a same joining key stored in a plurality of master tables is deleted, a data section of the replica table corresponding to the deleted data is replaced with a predetermined insufficient data setting value, and

when all data having a same joining key stored in a plurality of master tables is deleted, data deletion is conducted for the replica table in association with data having the same joining key.

14. A replication program according to claim 6, wherein said timing information to conduct a replication indicates that when either one of data having a same joining key stored in a plurality of master tables is deleted, data deletion is conducted for the replica table in association with data having the same joining key.